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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/675,480 | 09/30/2003 | Joy P. L. Chik | 224590 | 6000 |
| 38887 | 7590 | 10/18/2005 | | |
| LEYDIG, VOIT & MAYER, LTD. TWO PRUDENTIAL PLAZA, SUITE 4900 180 NORTH STETSON CHICAGO, IL 60601-6780 | | | EXAMINER AMINI, JAVID A | |
| | | | ART UNIT 2672 | PAPER NUMBER |

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,480

Applicant(s)

CHIK ET AL.

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 17-28 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Allowable Subject Matter

Claim 29 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for Claim 29 allowance:

The prior art cited in its entirety fails to teach or suggest a method of identifying missing glyphs at the remote terminal, and storing the fragment index on a local computer system for maintaining the fragment cache on the remote terminal, and the fragment cache identified by the fragment index.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 17-28 and 30-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Peter Druschel, Larry L. Peterson (hereinafter, Druschel), and further in view of Paul R. Calder and Mark A. Linton (hereinafter, Calder).

Claims 1, 17, 24 and 30.

Druschel on page 190 under section 2.1.1 networks and buffers teaches the following limitations:

“A computer-readable medium having computer-executable instructions for performing steps to communicate with a remote terminal for displaying graphic user interface, comprising: receiving

a drawing request to display a fragment on the remote terminal” Druschel at the same page in the second column teaches (On the output side, an ADU is often stored in a single contiguous buffer, and then fragmented into a set of smaller PDUs by lower level protocols. Fragmentation need not disturb the original buffer holding the ADU; each fragment can be represented by an offset/length into the original buffer). However, Druschel silences about a plurality of glyphs in a fragment, Examiner’s interpretation: A glyph is a displayed or printed image, in typography, a glyph may be a single letter, an accent mark or a ligature. They stored often in a buffer.

Regarding the limitations in claims 17 and 30, i.e. an entry in the second table. Druschel on page 194, left col. teaches generating a list, i.e. considered as index and updating page tables. Due to the broad claim languages Examiner interprets the limitations as follows: generating a list can be considered as a first table that Applicant claims, and updating page tables can be considered as a second table that Applicant claims. On the other hand Calder on page 96 in the second column teaches a glyph protocol for user interfaces. Calder’s work is considered as an editor application, and since is written in C++ (see page 92 in second column) then is compatible with Druschel’s ADU fragment. Each fragment of Druschel can be contained a plurality of glyphs that Calder teaches in fig. 2. See following limitations: “the fragment including a plurality of glyphs”. Calder on page 96 under subject of Glyph protocol teaches a Glyph protocol that determines how much space (e.g. memory, cache, storage and etc.) allocated in a terminal (Examiner’s interpretation: the terminal can be considered as local or remote terminal), and Calder does not explicitly specify the remote terminal, however, the glyph protocol is written in C++ and is compatible with TCP/IP protocol (the set of communications protocols that implement the protocol stack on which the Internet runs. It is sometimes called the TCP/IP protocol suite, the Transmission

Control Protocol (TCP) and the Internet Protocol (IP)), therefore, it is obvious that Calder teaches the following limitations: “determining whether the fragment has been cached in a fragment cache at the remote terminal; when it is determined that the fragment has been cached, sending a fragment index associated with the fragment to the remote terminal, the fragment index identifying an entry in the fragment cache that stores data representing the fragment”.

Druschel’s work in fig. 1 illustrates data source and data sink, meaning the data source is said to run in the originator domain; and the other modules run in receiver domains, see page 190 under section 2.1. An alternative wording is as follows: sending a fragment index associated with the fragment to the remote terminal, the fragment index identifying an entry in the fragment cache that stores data representing the fragment. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Calder into Druschel in order to provide user interface toolkits such as simple set of flyweight components, called glyphs. Calder on page 100, second column teaches this application allocates memory to store the actual text of the document. It uses three buffers: the first buffer stores the character codes, the second stores character formats, and the third stores pointers to the (shared) Character glyphs. The user will have an advantage offered by lightweight objects such as glyphs will provide substantial leverage for building these type of applications.

Claims 18-21, and 31.

Druschel on page 194, left col. teaches generating a list of fast buffers from the aggregate object. Applicant requires narrowing down the term glyph in order to overcome the rejection for this claim. The step of claim 19 is obvious because each list is separated by a space; again the Applicant needs to elaborate more about the term “space” in claim 19. The step for claim 20 is

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also obvious because Druschel on page 190, second paragraph teaches the claims limitation.

Regarding claim 21 the step is obvious because on page 201, section 5.3, teaches the TLB entries are tagged with a domain identifier, i.e. covered the remote terminal and identifying storage locations.

Claim 22.

Calder on page 100, second column teaches this application allocates memory to store the actual text of the document. It uses three buffers: the first buffer stores the character codes, the second stores character formats, and the third stores pointers to the (shared) Character glyphs. The glyph protocol is written in C++ and is compatible with TCP/IP protocol (the set of communications protocols that implement the protocol stack on which the Internet runs. It is called the TCP/IP protocol suite, the Transmission Control Protocol (TCP) and the Internet Protocol (IP)), therefore, it is obvious that Calder teaches the claim limitations.

Claim 23.

Druschel on page 197, right col. teaches the broad limitation in the claim.

Claim 25.

Druschel on page 191, right col. teaches the step of broad limitation of identifying the location of storage on a network.

Claims 26 and 28.

Druschel on page 194 section 3.2.1 teaches the broad limitation in this claim.

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Claim 27.

The claim language of glyph cache system does not have any type of description in the specification. Druschel on page 192, right col. discloses all modern operating systems to employ a two-level virtual memory system, since the Applicant claims fragment cache is based on a glyph cache system.

Claims 32 and 33.

Druschel on 192, right col. teaches a server. Also on page 194, section 3.2.3 teaches integrated buffer management/transfer.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 17 and 30 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. US 6,657,625 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because.

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The only differences between the claim in the current application and the claim in the patent are shown with underlined and bolded characters. Therefore, claim 1 is broader than patented claim 1. The courts have upheld that a broader claim of a patented claim is obvious type double patenting, (*In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970)).

The obviousness-type double patenting claims from the current Application and the Patent are as follows:

The obviousness-type double patenting for claims 17 and 30 are similar to the obviousness-type double patenting of claim 1, therefore they are not repeated.

Claim 1 of Current Application:

Claim 1. A computer-readable medium having computer-executable instructions for performing steps to communicate with a remote terminal for displaying graphic user interface, comprising: receiving a drawing request to display a fragment on the remote terminal, the fragment including a plurality of glyphs; determining whether the fragment has been cached in a fragment cache at the remote terminal; when it is determined that the fragment has been cached, sending a fragment index associated with the fragment to the remote terminal, the fragment index identifying an entry in the fragment cache that stores data representing the fragment.

Claim 1 of Patent No. US 6,657,625 B1

1. A computer-readable medium having computer-executable instructions for performing steps to communicate with a remote terminal for displaying graphic user interface, comprising: receiving a drawing request to display a fragment on the remote terminal, the fragment including a plurality of glyphs; determining whether the fragment has been cached in a fragment cache at the remote terminal; when it is determined that the fragment has been cached, sending a fragment

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index associated with the fragment to the remote terminal, the fragment index identifying an entry in the fragment cache that stores data representing the fragment; checking whether each of the glyphs in the fragment has been cached in glyph caches at the remote computer; and for a glyph in the fragment that has not been cached, sending graphic representation data for said glyph and a cell index to the remote terminal, the cell index identifying a cell in the glyph caches for storing the graphic representation data for said glyph.

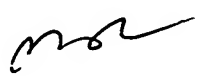
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JEFFERY BRIEN
PRIMARY EXAMINER

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Examiner
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